



## General

### Guideline Title

Placenta praevia, placenta praevia accreta and vasa praevia: diagnosis and management.

## Bibliographic Source(s)

Royal College of Obstetricians and Gynaecologists (RCOG). Placenta praevia, placenta praevia accreta and vasa praevia: diagnosis and management. London (UK): Royal College of Obstetricians and Gynaecologists (RCOG); 2011 Jan. 26 p. (Green-top guideline; no. 27). [169 references]

#### Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Royal College of Obstetricians and Gynaecologists (RCOG). Placenta praevia: diagnosis and management. London (UK): Royal College of Obstetricians and Gynaecologists (RCOG); 2005 Oct. 12 p. (Guideline; no. 27)

# Recommendations

# Major Recommendations

In addition to these evidence-based recommendations, the guideline development group also identifies points of best clinical practice in the original guideline document.

Classification of evidence levels (1+ to 4) and grades of recommendations (A-D) are defined at the end of the "Major Recommendations" field.

Screening and Diagnosis for Placenta Praevia/Accreta

Should We Screen for Placental Localisation?

D - Routine ultrasound scanning at 20 weeks of gestation should include placental localisation.

How Should We Image for Placental Localisation?

C - Transvaginal scans improve the accuracy of placental localisation and are safe, so the suspected diagnosis of placenta praevia at 20 weeks of gestation by abdominal scan should be confirmed by transvaginal scan.

Which Women Need Further Imaging if the Placenta Is Low at 20 Weeks of Gestation?

C - All women require follow-up imaging if the placenta covers or overlaps the cervical os at 20 weeks of gestation.

C - Women with a previous caesarean section require a higher index of suspicion as there are two problems to exclude: placenta praevia and placenta accreta. If the placenta lies anteriorly and reaches the cervical os at 20 weeks, a follow-up scan can help identify if it is implanted into the caesarean section scar.

When Should Further Imaging Occur?

- D In cases of asymptomatic women with suspected minor praevia, follow-up imaging can be left until 36 weeks of gestation.
- D In cases with asymptomatic suspected major placenta praevia or a question of placenta accreta, imaging should be performed at around 32 weeks of gestation to clarify the diagnosis and allow planning for third-trimester management, further imaging, and delivery.

How Can a Morbidly Adherent Placenta Be Diagnosed?

D - Antenatal sonographic imaging can be complemented by magnetic resonance imaging in equivocal cases to distinguish those women at special risk of placenta accreta.

Antenatal imaging techniques that can help to raise the suspicion of a morbidly adherent placenta should be considered in any situation where any part of the placenta lies under the previous caesarean section scar, but the definitive diagnosis can be made only at surgery. These techniques include ultrasound and magnetic resonance imaging.

#### Antenatal Management

Where Should Women with Placenta Praevia Be Cared for in the Late Third Trimester?

D - Any home-based care requires close proximity to the hospital, the constant presence of a companion, and full informed consent by the woman.

Is There a Place for Tocolytics in Women Who Bleed?

C - Tocolysis for treatment of bleeding due to placenta praevia may be useful in selected cases. However, beta-mimetics were used in the studies to date and, as these are known to be associated with significant adverse effects, the agent and optimum regime are still to be determined: further research is needed in this area.

#### Preparations for Delivery

In What Situations Can Vaginal Delivery Be Contemplated for Women with a Low-Lying Placenta?

C - The mode of delivery should be based on clinical judgement supplemented by sonographic information. A woman with a placental edge less than 2 cm from the internal os in the third trimester is likely to need delivery by caesarean section, especially if the placenta is thick, but the evidence for this is poor and further research in this area is needed.

At What Gestation Should Elective Delivery Occur?

D - Elective delivery by caesarean section in asymptomatic women is not recommended before 38 weeks of gestation for placenta praevia, or before 36–37 weeks of gestation for suspected placenta accreta.

What Blood Products Are Needed?

Placenta Praevia

- D There is no evidence to support the use of autologous blood transfusion for placenta praevia.
- D Cell salvage may be considered in women at high risk of massive haemorrhage and especially in women who would refuse donor blood.

Suspected Placenta Accreta

D - Cross-matched blood and blood products should be readily available in anticipation of massive haemorrhage. Where available, cell salvage should be considered and if the woman refuses donor blood it is recommended that she be transferred to a unit with a cell saver.

When Is Interventional Radiology Indicated?

D - Interventional radiology can be life saving for the treatment of massive postpartum haemorrhage, and therefore having this facility available locally is desirable. If a woman is suspected of having placenta accreta and she refuses donor blood, it is recommended that she be transferred to a unit with an interventional radiology service.

D - The place of prophylactic catheter placement for balloon occlusion or in readiness for embolisation if bleeding ensues requires further evaluation.

What Grade of Obstetrician Should Attend?

D - Any woman going to theatre electively with suspected placenta praevia accreta should be attended by a consultant obstetrician and anaesthetist. If the delivery is unexpected, out-of-hours consultant staff should be alerted and attend as soon as possible.

Surgery in the Presence of Placenta Accreta, Increta, and Percreta

What Surgical Approach Should Be Used for Suspected Placenta Praevia Accreta?

C/D - Surgeons delivering the baby by caesarean section in the presence of a suspected placenta praevia accreta should consider opening the uterus at a site distant from the placenta, and delivering the baby without disturbing the placenta, in order to enable conservative management of the placenta or elective hysterectomy to be performed if the accreta is confirmed. Going straight through the placenta to achieve delivery is associated with more bleeding and a high chance of hysterectomy and should be avoided.

What Should Be Done if the Placenta Does Not Separate after Delivery of the Baby?

C/D - If the placenta fails to separate with the usual measures, leaving it in place and closing, or leaving it in place, closing the uterus and proceeding to a hysterectomy are both associated with less blood loss than trying to separate it.

What Happens if the Placenta Separates, or Partially Separates?

D - If the placenta partially separates, the separated portion(s) need to be delivered and any haemorrhage that occurs needs to be dealt with in the normal way. Adherent portions can be left in place, but blood loss in such circumstances can be large and massive haemorrhage management needs to follow in a timely fashion.

How Is Massive Haemorrhage Best Managed?

D - The surgical manoeuvres required in the face of massive haemorrhage associated with placenta praevia caesarean sections should be performed by appropriately experienced surgeons. Calling for extra help early should be encouraged and not seen as 'losing face'.

Management of massive haemorrhage should occur in the normal way, including the use of uterotonic agents, which can be very helpful in reducing the blood loss associated with bleeding from the relatively atonic lower uterine segment. Advanced techniques may also be employed and the use of bimanual compression or even aortic compression can buy time for extra help to arrive, or for the anaesthetist to 'catch up' haemodynamically in the unstable woman. [Evidence level 3]

Follow-Up of the Woman after Part or All of the Placenta Has Been Retained Following Placenta Accreta

How Should the Woman Be Managed after Placental Retention?

D - The woman should be warned of the risks of bleeding and infection postoperatively and prophylactic antibiotics may be helpful in the immediate postpartum period to reduce this risk. Neither methotrexate nor arterial embolisation reduces these risks and neither is recommended routinely.

Vasa Praevia

Can We Diagnose Vasa Praevia Clinically?

In the antenatal period, in the absence of vaginal bleeding, there is no method to diagnose vasa praevia clinically.

D - In the intrapartum period, in the absence of vaginal bleeding, vasa praevia can occasionally be diagnosed clinically by palpation of fetal vessels in the membranes at the time of vaginal examination. This can be confirmed by direct visualisation using an amnioscope.

Without access to the fetal membranes, it is not possible to diagnose the intact vessels of vasa praevia clinically. Once the cervix has started to dilate, these vessels may be felt digitally during a vaginal examination. As the condition is rare, most clinicians will not be familiar with what they are feeling, and it is therefore important for clinicians to have a high index of suspicion if they feel something unusual and to confirm the diagnosis prior to membrane rupture if the consequences of fetal haemorrhage are to be avoided. Direct visualisation using an amnioscope has some use, but this only gives visual access to the area of membranes exposed by the dilated cervix. [Evidence level 3]

Following delivery of the placenta, it is easy to confirm the presence of fetal vessels running through the membranes by simple clinical examination,

but it is more difficult to diagnose vasa praevia as the orientation of the vessels in relation to the internal cervical os and fetal presenting part in utero is not certain after delivery.

D - In the presence of vaginal bleeding, especially associated with membrane rupture and fetal compromise, delivery should not be delayed to try and diagnose vasa praevia.

Because of the speed at which fetal exsanguination can occur and the high perinatal mortality rate associated with ruptured vasa praevia, delivery should not be delayed while trying to confirm the diagnosis if fetal wellbeing is compromised. [Evidence level 4]

Can We Differentiate between Fetal and Maternal Bleeding?

C - Various tests exist that can differentiate between fetal and maternal blood, but they are often not applicable in the clinical situation.

Can Vasa Praevia Be Diagnosed Using Ultrasound?

C - Vasa praevia can be accurately diagnosed with colour Doppler ultrasound, often utilising the transvaginal route.

Should We Screen for Vasa Praevia?

D - At present, vasa praevia should not be screened for routinely at the time of the mid-trimester anomaly scan, as it does not fulfill the criteria for a screening programme.

How Should Vasa Praevia Be Managed?

C - In the presence of bleeding vasa praevia, delivery should be achieved by category 1 emergency caesarean section.

Fetal wellbeing should be confirmed at the time of any antepartum or intrapartum haemorrhage, and this is currently best achieved using the cardiotocograph. If signs of acute fetal compromise are present, delivery should be achieved as soon as possible, usually by category 1 caesarean section, to minimise the risk of fetal exsanguination. Delay to facilitate ultrasound or transfer to another unit could result in fetal demise. [Evidence level 2+]

C - In cases of suspected vasa praevia, transvaginal colour Doppler ultrasonography should be carried out to confirm the diagnosis.

If there is either an ultrasound or clinical suspicion of vasa praevia in the absence of fetal compromise, a formal systematic assessment of the region of the internal cervical os should be undertaken using transvaginal colour Doppler ultrasound. [Evidence level 2+]

C - In confirmed cases of vasa praevia at term, delivery should be carried out by elective caesarean section in a timely manner.

In view of the risk of fetal haemorrhage with the onset of labour or membrane rupture and the minimal risks of neonatal lung disease, once vasa praevia has been confirmed at term, delivery should be carried out by elective caesarean section as soon as is practicable. [Evidence level 2+]

- D In cases of confirmed vasa praevia in the third trimester, antenatal admission from 28 to 32 weeks of gestation to a unit with appropriate neonatal facilities will facilitate quicker intervention in the event of bleeding or labour.
- A In view of the increased risk of preterm delivery, administration of corticosteroids for fetal lung maturity should be considered.
- C In the presence of confirmed vasa praevia, elective caesarean section should be carried out prior to the onset of labour.
- D Laser ablation in utero may have a role in the treatment of vasa praevia.

#### Definitions:

Grades of Recommendations

A - At least one meta-analysis, systematic review or randomised controlled trial rated as 1++ and directly applicable to the target population; or

A systematic review of randomised controlled trials or a body of evidence consisting principally of studies rated as 1+ directly applicable to the target population and demonstrating overall consistency of results

B - A body of evidence including studies rated as 2++ directly applicable to the target population, and demonstrating overall consistency of results; or

Extrapolated evidence from studies rated as 1++ or 1+

C - $A$ body of evidence including studies rated as 2+ directly applicable to the target population and demonstrating overall consistency of results; $or$
Extrapolated evidence from studies rated as 2++
D - Evidence level 3 or 4; or
Extrapolated evidence from studies rated as 2+
Good Practice Point - Recommended best practice based on the clinical experience of the guideline development group
Classification of Evidence Levels
1++ High-quality meta-analyses, systematic reviews of randomised controlled trials, or randomised controlled trials with a very low risk of bias
1+ Well-conducted meta-analyses, systematic reviews of randomised controlled trials, or randomised controlled trials with a low risk of bias
1- Meta-analyses, systematic reviews of randomised controlled trials, or randomised controlled trials with a high risk of bias
2++ High-quality systematic reviews of case-control or cohort studies or high-quality case-control or cohort studies with a very low risk of confounding, bias, or chance and a high probability that the relationship is causal
2+ Well-conducted case-control or cohort studies with a low risk of confounding, bias, or chance and a moderate probability that the relationship is causal
2- Case-control or cohort studies with a high risk of confounding, bias, or chance and a significant risk that the relationship is not causal
3 Non-analytical studies; e.g., case reports, case series
4 Expert opinion
Clinical Algorithm(s)  None provided
Scope
Disease/Condition(s)
Placenta praevia, placenta praevia accreta, and vasa praevia
Guideline Category
Counseling
Diagnosis
Evaluation
Management
Treatment
Clinical Specialty
Anesthesiology

Internal Medicine
Obstetrics and Gynecology

Radiology

Family Practice

### **Intended Users**

Advanced Practice Nurses

Nurses

Physician Assistants

Physicians

## Guideline Objective(s)

- To describe the diagnostic modalities used for placenta praevia, vasa praevia, and a morbidly adherent placenta and how they are applied during the antenatal period
- To describe clinical management in the antenatal and peripartum period with specific reference to the anticipation, planning, and timing of surgery, as well as to the advanced techniques and interventions available for managing placenta accreta

# **Target Population**

Pregnant women

## Interventions and Practices Considered

Diagnosis/Screening

- 1. Routine abdominal ultrasound scanning
- 2. Transvaginal ultrasound scanning
- 3. Follow-up imaging
- 4. Magnetic resonance imaging
- 5. Palpation of fetal vessels during vaginal examination (for vasa praevia)
- 6. Direct visualisation of fetal vessels using an amnioscope (for vasa praevia)
- 7. Transvaginal colour Doppler ultrasound (for vasa praevia)

#### Management

Management of Placenta Praevia/Accreta

- 1. For home-based care, close proximity to the hospital, the constant presence of a companion, and full informed consent by the woman
- 2. Selected use of tocolysis treatment for bleeding due to placenta praevia
- 3. Choice of mode of delivery
  - Vaginal
  - Caesarean
- 4. Attendance by a consultant obstetrician and anaesthetist for elective delivery with suspected placenta praevia accreta
- 5. Management of massive haemorrhage
  - Appropriately experienced surgeons
  - Cell salvage
  - Readily available cross-matched blood and blood products

- Interventional radiology
- 6. Management of unseparated or partially separated placenta
  - Conservative management
  - Elective hysterectomy
- 7. Follow-up care

#### Management of Vasa Praevia

- 1. Category 1 emergency caesarean section in the presence of bleeding vasa praevia
- 2. Elective caesarean section prior to the onset of labor
- 3. Admission to a hospital unit with appropriate neonatal facilities from 28 to 32 weeks of gestation
- 4. Corticosteroids for fetal lung maturity
- 5. Laser ablation in utero

Note: The guideline developers discussed but did not recommend the following interventions:

Elective caesarean delivery in asymptomatic women before 38 weeks of gestation for placenta praevia, or before 36-37 weeks of gestation for suspected placenta accreta

Autologous blood transfusion for placenta praevia

Routine methotrexate or arterial embolisation for placental retention

Routine screening for vasa praevia

## Major Outcomes Considered

- Maternal and fetal/neonate morbidity and mortality
- · Sensitivity, specificity, positive predictive value, negative predictive value, and false negative rates of diagnostic tests
- Rates of subsequent pregnancy

# Methodology

### Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Primary Sources)

Searches of Electronic Databases

# Description of Methods Used to Collect/Select the Evidence

The Cochrane Library, EMBASE, and Medline were searched for relevant randomised controlled trials, systematic reviews and meta-analyses: for placenta praevia and accreta the search dated from 2004 to 2009 (the search for the previous guidelines was up to May 2004); the search for vasa praevia was dated from 1950 to August 2009. The searches were performed using MeSH headings placenta praevia and placenta accreta and vasa praevia. As with the previous editions of this guideline, the majority of publications on placenta praevia and accreta are retrospective studies, case reports, and reviews, with a paucity of prospective studies and randomised trials or meta-analyses. This was also the case for vasa praevia. In addition to the above the National Patient Safety Agency (NPSA), the Royal College of Obstetricians and Gynaecologists (RCOG) and the Royal College of Midwives (RCM) ran a pilot care bundle for placenta praevia and caesarean section during 2008 and information from this has been included, although publication from this work postdated the end of the literature search.

## Number of Source Documents

Not stated

## Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

## Rating Scheme for the Strength of the Evidence

Classification of Evidence Levels

- 1+++ High-quality meta-analyses, systematic reviews of randomised controlled trials, or randomised controlled trials with a very low risk of bias
- 1+ Well-conducted meta-analyses, systematic reviews of randomised controlled trials, or randomised controlled trials with a low risk of bias
- 1- Meta-analyses, systematic reviews of randomised controlled trials, or randomised controlled trials with a high risk of bias
- 2++ High-quality systematic reviews of case-control or cohort studies or high-quality case-control or cohort studies with a very low risk of confounding, bias, or chance and a high probability that the relationship is causal
- 2+ Well-conducted case-control or cohort studies with a low risk of confounding, bias, or chance and a moderate probability that the relationship is causal
- 2- Case-control or cohort studies with a high risk of confounding, bias, or chance and a significant risk that the relationship is not causal
- 3 Non-analytical studies; e.g., case reports, case series
- 4 Expert opinion

## Methods Used to Analyze the Evidence

Review of Published Meta-Analyses

Systematic Review

# Description of the Methods Used to Analyze the Evidence

Reviewing and Grading of Evidence

Once the evidence has been collated for each clinical question it needs to be appraised and reviewed (refer to section 3 in "Development of RCOG Green-top guidelines: producing a clinical practice guideline" for information on the formulation of the clinical questions; see the "Availability of Companion Documents" field). For each question, the study type with least chance of bias should be used. If available, randomised controlled trials (RCTs) of suitable size and quality should be used in preference to observational data. This may vary depending on the outcome being examined.

The level of evidence and the grade of the recommendations used in this guideline originate from the guidance by the Scottish Intercollegiate Guidelines Network (SIGN) Grading Review Group, which incorporates formal assessment of the methodological quality, quantity, consistency, and applicability of the evidence base. The methods used to appraise individual study types are available from the SIGN Web site (www.sign.ac.uk/methodology/checklists.html \_\_\_\_\_\_\_\_). An objective appraisal of study quality is essential, but paired reviewing by guideline leads may be impractical because of resource constraints.

Once evidence has been collated and appraised, it can be graded. A judgement on the quality of the evidence will be necessary using the grading system (see the "Rating Scheme for the Strength of the Evidence" field). Where evidence is felt to warrant 'down-grading', for whatever reason, the rationale must be stated. Evidence judged to be of poor quality can be excluded. Any study with a high chance of bias (either 1— or 2—) will be excluded from the guideline and recommendations will not be based on this evidence. This prevents recommendations being based on poor-quality RCTs when higher-quality observational evidence is available.

### Methods Used to Formulate the Recommendations

Informal Consensus

## Description of Methods Used to Formulate the Recommendations

Guideline Development

The development of guidelines involves more than the collation and reviewing of evidence. Even with high-quality data from systematic reviews of randomised controlled trials, a value judgement is needed when comparing one therapy with another. This will therefore introduce the need for consensus.

Royal College of Obstetricians and Gynaecologists (RCOG) Green-top guidelines are drafted by nominated developers, in contrast to other guideline groups such as the National Institute for Health and Clinical Excellence (NICE) and the Scottish Intercollegiate Guidelines Network (SIGN), who use larger guideline development groups. Equally, in contrast to other guideline groups, the topics chosen for development as Greentop guidelines are concise enough to allow development by a smaller group of individuals.

In agreeing the precise wording of evidence-based guideline recommendations and in developing consensus-based 'good practice points', the Guidelines Committee (GC) will employ an informal consensus approach through group discussion. In line with current methodologies, the entire development process will follow strict guidance and be both transparent and robust. The RCOG acknowledges that formal consensus methods have been described but these require further evaluation in the context of clinical guideline development. It is envisaged that this will not detract from the rigor of the process but prevent undue delays in development.

## Rating Scheme for the Strength of the Recommendations

Grades of Recommendations

A - At least one meta-analysis, systematic review or randomised controlled trial rated as 1++ and directly applicable to the target population; or

A systematic review of randomised controlled trials or a body of evidence consisting principally of studies rated as 1+ directly applicable to the target population and demonstrating overall consistency of results

B - A body of evidence including studies rated as 2++ directly applicable to the target population, and demonstrating overall consistency of results;

Extrapolated evidence from studies rated as 1++ or 1+

C - A body of evidence including studies rated as 2+ directly applicable to the target population and demonstrating overall consistency of results; or

Extrapolated evidence from studies rated as 2++

D - Evidence level 3 or 4; or

Extrapolated evidence from studies rated as 2+

Good Practice Point - Recommended best practice based on the clinical experience of the guideline development group

# Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

## Method of Guideline Validation

External Peer Review

Internal Peer Review

## Description of Method of Guideline Validation

Following discussion in the Guidelines Committee (GC), each Green-top guideline is formally peer reviewed. At the same time, the draft guideline is published on the Royal College of Obstetricians and Gynaecologists (RCOG) Web site for further peer discussion before final publication.

All comments will be collated by the RCOG and tabulated for consideration by the guideline leads. Each comment will require discussion. Where comments are rejected then justification will need to be made. Following this review, the document will be updated and the GC will then review the revised draft and the table of comments.

Once the GC signs-off on the guideline, it is submitted to the Standards Board for approval before final publication.

# Evidence Supporting the Recommendations

## Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations" field).

# Benefits/Harms of Implementing the Guideline Recommendations

### Potential Benefits

Appropriate diagnosis and management of placenta praevia, placenta praevia accreta, and vasa praevia to reduce maternal and fetal morbidity and mortality

### Potential Harms

- Risk of false-positive and false-negative results of diagnostic imaging
- In a large retrospective study of 350 cases of placenta praevia, 210 women who received regional blockade were compared with 140 women who received general anaesthesia. There was more blood loss and more transfusion requirements in those having a general anaesthetic, and the two women who experienced major morbidity (one pulmonary embolus and one cerebral embolus) both had general anaesthetics. A second trial was a small randomised controlled trial of regional versus general anaesthesia for placenta praevia where 12 women received general anaesthetic and 13 women received regional blockade. The numbers were small and more women in the general anaesthetic group had placenta praevia accreta (two versus one) or anterior praevia (four versus one), but outcomes were similar for the babies. Blood transfusion requirements (although not estimated blood loss) were greater in the general anaesthetic group.
- In a case series of conservative management, two women had a planned delayed straightforward hysterectomy after having had arterial embolisation and conservative management of the placenta followed up with methotrexate treatment. One case had a successful elective evacuation of retained products of conception after 4 months, while two women had complications after conservative management: one had partial accreta and had heavy bleeding requiring hysterectomy on day 3 post—caesarean section, while the other had recurrent problems with infection resulting in an evacuation of retained products of conception followed by severe sepsis on day 33.
- A comprehensive review of all case reports published up to 2007 summarises the conservative management of 60 women with placenta accreta and quantifies the risks of haemorrhage and infectious complications. The outcomes for those women who received no additional treatment were the same as those receiving either methotrexate or embolisation: of 26 women having no additional measures, four required hysterectomy; of 22 receiving methotrexate, five required hysterectomy; and of 12 having additional embolisation, three required hysterectomy. Infection occurred in 11 of the 60 women (18%), bleeding in 21 (35%) and disseminated intravascular coagulation in four (7%). Bleeding started a few hours after surgery up until 3 months post-delivery. A more recent case report described severe sepsis after an evacuation of retained products of conception on day 33.

# **Qualifying Statements**

## Qualitying Statements

- These recommendations are not intended to dictate an exclusive course of management or treatment. They must be evaluated with reference
  to individual patient needs, resources and limitations unique to the institution, and variations in local populations. It is hoped that this process
  of local ownership will help to incorporate these guidelines into routine practice. Attention is drawn to areas of clinical uncertainty where
  further research may be indicated.
- The Royal College of Obstetricians and Gynaecologists (RCOG) produces guidelines as an educational aid to good clinical practice. They
  present recognised methods and techniques of clinical practice, based on published evidence, for consideration by obstetricians and
  gynaecologists and other relevant health professionals. The ultimate judgement regarding a particular clinical procedure or treatment plan
  must be made by the doctor or other attendant in the light of clinical data presented by the patient and the diagnostic and treatment options
  available.
- This means that RCOG guidelines are unlike protocols or guidelines issued by employers, as they are not intended to be prescriptive
  directions defining a single course of management. Departure from the local prescriptive protocols or guidelines should be fully documented
  in the patient's case notes at the time the relevant decision is taken.

# Implementation of the Guideline

## Description of Implementation Strategy

An implementation strategy was not provided.

## Implementation Tools

Audit Criteria/Indicators

For information about availability, see the Availability of Companion Documents and Patient Resources fields below.

# Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Getting Better

## **IOM Domain**

Effectiveness

Patient-centeredness

# Identifying Information and Availability

# Bibliographic Source(s)

Royal College of Obstetricians and Gynaecologists (RCOG). Placenta praevia, placenta praevia accreta and vasa praevia: diagnosis and management. London (UK): Royal College of Obstetricians and Gynaecologists (RCOG); 2011 Jan. 26 p. (Green-top guideline; no. 27). [169 references]

## Adaptation

Not applicable: The guideline was not adapted from another source.

## Date Released

2001 Jan (revised 2011 Jan)

## Guideline Developer(s)

Royal College of Obstetricians and Gynaecologists - Medical Specialty Society

## Source(s) of Funding

Royal College of Obstetricians and Gynaecologists

## Guideline Committee

Guidelines Committee

## Composition of Group That Authored the Guideline

Authors: Dr T A Johnston, FRCOG, Birmingham and Miss S Paterson-Brown, FRCS, FRCOG, London

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Guidelines Committee lead reviewers: Dr K R Langford, FRCOG, London and Mrs C E Overton, FRCOG, Bristol

### Financial Disclosures/Conflicts of Interest

Guideline authors are required to complete a "declaration of interests" form.

### Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Royal College of Obstetricians and Gynaecologists (RCOG). Placenta praevia: diagnosis and management. London (UK): Royal College of Obstetricians and Gynaecologists (RCOG); 2005 Oct. 12 p. (Guideline; no. 27)

## Guideline Availability

Electronic copies: Available from the Royal College of Obstetricians and Gynaecologists (RCOG) Web site

# Availability of Companion Documents

The following are available:

• Development of RCOG Green-top guidelines: policies and processes. Clinical Governance Advice No 1a. London (OK): Royal College of
Obstetricians and Gynaecologists (RCOG); 2006 Nov. 6 p. Electronic copies: Available from the Royal College of Obstetricians and
Gynaecologists (RCOG) Web site
• Development of RCOG Green-top guidelines: producing a scope. Clinical Governance Advice No 1b. London (UK): Royal College of
Obstetricians and Gynaecologists (RCOG); 2006 Nov. 4 p. Electronic copies: Available from the RCOG Web site
• Development of RCOG Green-top guidelines: producing a clinical practice guideline. Clinical Governance Advice No 1c. London (UK):
Royal College of Obstetricians and Gynaecologists (RCOG); 2006 Nov. 13 p. Electronic copies: Available from the RCOG Web site
• Development of RCOG Green-top guidelines: consensus methods for adaptation of Green-top guidelines. Clinical Governance Advice No
1d. London (UK): Royal College of Obstetricians and Gynaecologists (RCOG); 2010 Feb. 9 p. Electronic copies: Available from the
RCOG Web site
In addition, auditable standards are available in section 10.4 of the original guideline document.

#### Patient Resources

The following is available:

• A low-lying placenta after 20 weeks (placenta praevia): information for you. 2007 Jan 1. 7 p. Available from the Royal College of Obstetricians and Gynaecologists (RCOG) Web site.

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

## **NGC Status**

This NGC summary was completed by ECRI on March 10, 2006. The information was verified by the guideline developer on April 26, 2006. This NGC summary was updated by ECRI Institute on June 16, 2011. The updated information was verified by the guideline developer on July 22, 2011.

## Copyright Statement

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## Disclaimer

## NGC Disclaimer

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